

IN THE CLAIMS:

Claims 1-14 have been amended in the following manner:

1 1. (Amended) A method for the elimination of spurious signal components (SS)  
2 in an input signal (ES), said method consisting of  
3 - the characterization, in a signal analysis phase (I), of signal components of the  
4 spurious signal components (SS) and of an information signal (NS) contained in the input  
5 signal (ES), and  
6 - the determination or generation, in a signal processing phase (II), of the  
7 information signal (NS) or an estimated information signal (NS') on the basis of the  
8 characterization obtained in the signal analysis phase (I),  
9 said characterization of the signal components (SS, NS) being performed under  
10 utilization at least of auditory-based features ( $M_1$  to  $M_j$ ).

1 2. (Amended) The method as in claim 1, wherein at least one of the following  
2 auditory features ( $M_1$  to  $M_j$ ) are used for the characterization of the signal components  
3 (NS, SS): loudness, spectral profile, harmonic structure, common build-up and decay  
4 times, coherent amplitude and frequency modulation, coherent phases, interaural runtime  
5 and level differences.

1 3. (Amended) The method as in claim 1, wherein the auditory features ( $M_1$  to  $M_j$ )  
2 are determined in different frequency bands.

1 4. (Amended) The method as in claim 1, wherein the characterization of the  
2 signal components (SS, NS) is performed by evaluating the features ( $M_1$  to  $M_j$ )

3 determined in the signal analysis phase (I), employing a primitive-grouping method.

1 5. (Amended) The method as in claim 1, wherein the characterization of the  
2 signal components (SS, NS) is performed by evaluating the features ( $M_1$  to  $M_j$ )  
3 determined in the signal analysis phase (I), employing a scheme-based grouping  
4 technique.

1 6. (Amended) The method as in claim 5, wherein a hypothesis is established or  
2 specified on the nature of the signal component (SS, NS) and is taken into account in the  
3 grouping of the identified features ( $M_1$  to  $M_j$ ).

1 7. (Amended) The method as in claim 5 or 6, wherein for the characterization  
2 of the signal components (NS, SS), at least the auditory features ( $M_1$  to  $M_j$ ) are grouped  
3 along the principles of a gestalt theory.

1 8. (Amended) The method as in claim 1, wherein the signal components  
2 identified as spurious noise components (SS) are suppressed and/or the signal  
3 components identified as information signals (NS) or estimated information signals (NS')  
4 are amplified.

1 9. (Amended) The method as in claim 1, wherein the information signal (NS) or  
2 an estimated information signal (NS') is synthesized in the signal processing phase (II)  
3 on the basis of the features ( $M_1$  to  $M_j$ ) detected in the signal analysis phase (I).

1 10. (Amended) The method as in claim 1, wherein with the aid of an analysis  
2 of the harmonic structure in the signal analysis phase (I), different base frequencies of the  
3 signal component of the information signal (NS) or of the estimated information signal  
4 (NS') are extracted and, with the aid especially of a loudness or LPC analysis, spectral  
5 levels of harmonics of these signal components are defined, and on the basis of the  
6 spectral levels and the harmonics an information signal for tonal speech components is  
7 synthesized.

1 11. (Amended) The method as in claim 1, wherein with the aid of an analysis of  
2 the harmonic structure in the signal analysis phase (I), nontonal signal components of the  
3 information signal (NS) or of the estimated information signal (NS') are extracted and,  
4 with the aid especially of a loudness or LPC analysis, spectral levels of these signal  
5 components are defined, and with the aid of a noise generator an information signal for  
6 nontonal speech components is synthesized.

1 12. (Amended) The method as in claim 10 or 11, wherein the information signal  
2 (NS) and/or the estimated information signal (NS') is amplified.

1 13. (Amended) Application of the method according to claim 1 for operating a  
2 hearing aid.

1 14. (Amended) Hearing aid operating by the method according to claim 1.